

WHAT IS CLAIMED IS:

1. A method of operating a spread spectrum receiver comprising:
tracking a first signal as a direct signal;
tracking a second signal as a multipath signal;
monitoring the delay between the direct signal and the multipath signal;
5 when the delay is within 1.5 chips, modeling the correlation products for the multipath
signal; and
compensating for the modeled correlation product.
2. The method of claim 1 wherein compensating for the modeled correlation product comprises subtracting the modeled correlation from the direct signal correlation.
3. The method of claim 1 wherein tracking a second signal comprises:
detecting a plurality of second signals;
comparing the magnitudes of the second signals; and
tracking the second signal having the greatest magnitude.
4. The method of claim 1 further comprising:
when the direct signal is obscured, tracking the multipath signal as the direct path
signal.
5. The method of claim 1 further comprising:
tracking changes in the progression of the delay; and
maintaining a model of the direct signal based on the progression of the delay.
6. The method of claim 5 further comprising:
when the direct signal is obscured, using the modeled direct path signal as the direct
path signal.
7. A spread spectrum receiver comprising:
means for tracking a first signal as a direct signal;

- 5 means for tracking a second signal as a multipath signal;
means for monitoring the delay between the direct signal and the multipath signal;
means for modeling the correlation products for the multipath signal when the delay
is within 1.5 chips; and
means for compensating for the modeled correlation product.

8. The receiver of claim 7 wherein the compensating means comprises means for subtracting the modeled correlation from the direct signal correlation.

9. The receiver of claim 7 wherein means for tracking a second signal comprises:
means for detecting a plurality of second signals;
means for comparing the magnitudes of the second signals; and
means for tracking the second signal having the greatest magnitude.

10. The receiver of claim 7 further comprising:
means for tracking the multipath signal as the direct path signal when the direct signal
is obscured.

11. The receiver of claim 10 further comprising:
means for tracking changes in the progression of the delay; and
means for maintaining a model of the direct signal based on the progression of the
delay.

12. The receiver of claim 11 further comprising:
means for using the modeled direct path signal as the direct path signal, when the direct
signal is obscured.